

## **What is claimed is:**

**[Claim 1]** A method of guaranteeing the invocation of a composite software service, one that contains a set of connected composite or atomic software services.

**[Claim 2]** The method of claim 1, further comprising: the exactly once invocation of a composite software service.

**[Claim 3]** The method of claim 1, further comprising: the automated guaranteed invocation of exactly once of each software service within a composite service, containing a set of connected software services, where any of the contained software services may itself be a composite service that can be nested with other composite services to any depth.

**[Claim 4]** The method of claim 3, wherein a persistent context mechanism capable of remembering the state of execution of an optionally nested composite service is used together with the association of unique ids to software services to implement the automated, exactly once invocation of composite software services.

**[Claim 5]** The method of claim 1, further comprising: the association of attributes to the software interface to define the parameters required for automating the guaranteed invocation of the service.

**[Claim 6]** A method of claim 5, further comprising: the association of an attribute to a software interface indicating whether the invocation of the service at runtime should be guaranteed.

**[Claim 7]** A method of claim 5, further comprising: the association of a numerical attribute to the software interface, with guaranteed invocation, indicating the number of times to retry the invocation of a service, if the initial attempt to invoke the service failed due to any internal or external system or network connectivity problems.

**[Claim 8]** A method of claim 5, further comprising: the association of a numerical attribute to the software interface, with guaranteed invocation, indicating the amount of time to pause between retries.

**[Claim 9]** All other methods and systems explicit or implicit in the description of the enclosed invention.